any locality in India. The only record is that of the holotype as mentioned in the Fauna.

ACKNOWLEDGMENTS

We thank Prof. Madhav Gadgil, Indian Institute of Science, Bangalore, for financial assistance under the DBT Project to carry out biodiversity research in Modern College and Mr. Ashok Captain for enlightening us on the mantids he has seen and photographed. We also thank Dr. T.K. Mukherjee (Department of Zoology, Hooghly Mohsin College, Chinsurah, Hooghly, W. Bengal) and Dr. A.K. Hazra (ZSI, Kolkata) for encouragement and help in identification. A number of students and friends brought in mantids from different parts of Pune and Maharashtra and we wish to thank them all,

particularly Sanjay Thakur, Rahul Marathe, Nilesh Rane, Krushnamegh Kunte, Rajpreet Kaur and Abhay Soman. The specimen of *Toxoderopsis taurus* (reported herein) was collected by the staff of the Bustard Sanctuary at Nannaj (Sholapur) and was brought to us through the courtesy of Mr. N.H.N. Shaikh (Deputy Conservator of Forests, Wildlife, Pune), Mr. P.N. Kukdolkar (Technical Assistant, Wildlife, Pune); we owe special thanks to them. We are indebted to the authorities of Modern College, for facilities and encouragement.

February 11, 2002

H.V. GHATE S.P. RANADE

Department of Zoology, Modern College, Shivajinagar, Pune 411 005, Maharashtra, India.

REFERENCES

- Breland, O.P. & J.W. Dobson (1947): Specificity of Mantid oothecae (Orthoptera: Mantidae). *Ann. Entomol. Soc. Amer.* 60(4): 557-575.
- CHATURVEDI, N. & V. HEDGE (2000): Mantid fauna of Sanjay Gandhi National Park, Mumbai, with some new records for Maharashtra State. *J. Bombay nat. Hist. Soc.* 97: 295-297.
- GHATE, H.V., S. RANADE, R. KAUR & R. MARATHE (2001): On *Hestiasula brunneriana* Saussure (Insecta: Mantodea) from Pune, Maharashtra. *J. Bombay nat. Hist. Soc. 98(3)*: 473-476.
- HEYWOOD, V.H. (Chief Ed) (1995): Global Biodiversity Assessment, Cambridge University Press, U.K., pp. 457.
- Myers, N., R.A. Mittermeier, C.G. Mittermeier, G.A.B. Da Fonseca & J. Kent (2000): Biodiversity hotspots for conservation priorities. *Nature* 403: 853-858.
- MUKHERJEE, T.K. & A.K. HAZRA (1983): On a small

- collection of Mantidae (Dictyoptera) from Maharashtra India with the description of a new species. *Rec. zool. Surv. India.* 80: 59-465.
- MUKHERJEE, T.K., A.K. HAZRA & A.K. GHOSH (1995): The mantid fauna of India (Insecta: Mantodea). *Oriental Ins.* 29: 185-358.
- NADKERNY, N.T. (1965): A note on the Mantids and Tettigonids in the collection of Bombay Natural History Society. J. Bombay nat. Hist. Soc. 62(1): 76-83.
- NADKARN!, N.T. (1974): Insects. *In*: Maharashtra State Gazetteers: General Series: Fauna (Ed: Kunte, B.G.). Government of Maharashtra, Bombay, pp.127.
- RANE, N., S. RANADE, H.V. GHATE & T.K. MUKHERJEE (2000): On the description of female of *Acromantis montana* from Kumta, Karnataka, Western Ghats (Mantodea: Hymenopodidae). *Entomon* 25(1): 61-62.

36. OCCURRENCE OF SPIDERS TRIAERIS MANII AND TRIAERIS POONAENSIS, FAMILY OONOPIDAE, IN A BANANA AGROECOSYSTEM IN VADODARA, GUJARAT

(With one plate)

During a recent survey in banana fields in and around Vadodara City, Gujarat, to study the spider diversity of the banana agroecosystem, we

came across two rare species of Family Oonopidae. Review of literature showed that these two spiders, *Triaeris manii* and

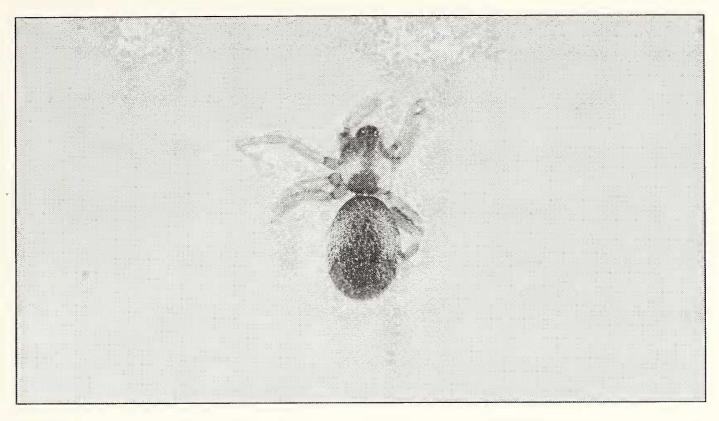


Fig. 1: Triaeris manii Tikader & Malhotra (16x)

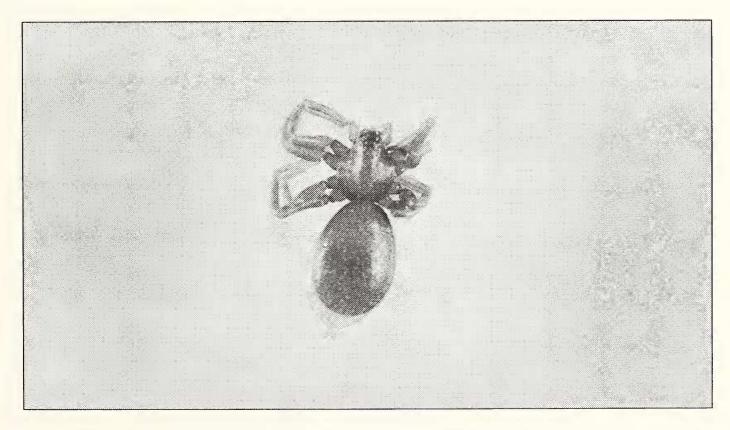


Fig. 2: *Triaeris poonaensis* Tikader & Malhotra (12x)



T. poonaensis were reported only once from the Indian subcontinent by Tikader and Malhotra (1974) from Poona, Maharashtra. This family is little known in India (Tikader and Malhotra 1974), hence it is a significant observation. These spiders mimic the beetles of Family Tenebrionidae. Their cephalothorax, legs and abdomen are reddish-brown. In the present study, these spiders were found inhabiting moist places like decaying leaves of the banana plant, while Tikader and Malhotra (op. cit.) found them under stones and dead bark of trees. Clearly, they prefer moist, dark, damp places, especially in decaying organic matter like dead leaves or the bark of a tree.

Triaeris manii Tikader & Malhotra (Plate 1, Fig. 1)

Cephalothorax, legs and abdomen reddishbrown. Abdomen nearly elliptical, clothed with fine hairs, scutum on dorsal side complete, on the ventral side incomplete, resembling the elytra of coleopterans. It measures about 2.4 mm in total length, Carapace 1.0 mm in length and 0.7 mm in width, whereas abdomen 1.4 mm in length and 1.2 mm in width. Males, females and juveniles were sighted in the field. They seem to be uncommon in the banana fields. Higher numbers were sighted in January.

Triaeris poonaensis Tikader & Malhotra
(Plate 2, Fig. 2)
Like T. manii, these spiders are red,

abdomen nearly elliptical, clothed with fine hairs, Dorsal side (except a little posterior part) with conspicuous scutum. Tikader and Malhotra (1974) reported males with complete scutum, unlike females. Ventral side also with scutum extending to base of spinnerets. Scarce in banana fields, only females and juveniles were sighted. Total length c. 2.8 mm, Carapace 1.0 mm in length and 0.8 mm in width, abdomen 1.9 mm in length and 1.2 mm in width. Higher numbers were sighted in January, as in *T. manii*.

The occurrence of uncommon spider species in a banana field indicates that the banana agroecosystem provides suitable conditions for breeding of spiders. Detailed studies of spider biology and ecology could be conducted in this agroecosystem.

ACKNOWLEDGEMENT

We thank Dr. B.K. Biswas, Zoological Survey of India, Kolkata, for confirmation of species and for literature.

March 7, 2001

MANJU SILIWAL
DOLLY KUMAR
Division of Entomology,
Department of Zoology,
Faculty of Science,
M.S. University of Baroda,
Vadodara 390 002,
Gujarat, India.

REFERENCE

TIKADER, B.K. & M.S. MALHOTRA (1974): Studies on some rare spiders of the family Oonopidae from Maharashtra, India. *Oriental Ins.* 8(4): 495-501.

37. VARIATIONS IN THE WEB OF TWO RELATED SPECIES OF SPIDERS GASTERACANTHA UNGUIFERA SIMON AND GASTERACANTHA HASSELTII C.L. KOCH

(With two text-figures)

Silk plays an important role in the life of spiders. At all life stages, spiders have the ability

to release silk (Hansell 1984), which is used not only to spin prey capture webs but also to make